L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:299182 CAPLUS Full-text
DN 126:277282
TI Preparation of S-[(benzyloxyphenyl)alkyl]isothiourea derivatives as inhibitors of Na+-Ca2+ exchanger
IN Hori, Manabu; Yamamoto, Takeshi; Ootaka, Hiroshi; Nakajima, Fumio; Harada, Kengo; Morita, Tominori
PA Kanebo Ltd, Japan
SO Jpn. Kokai Tokkyo Koho, 15 pp.
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PI	JP 09067336	A2	19970311	JP 1995-251775	19950904
	WO 9709306	A1	19970313	WO 1996-JP2491	19960903 <--
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	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRAI	JP 1995-251775	A	19950904		

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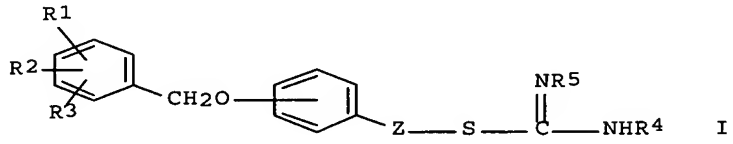

I

AB The title compds. [I; R1 - R3 = H, halo, NO2, lower alkyl or alkoxy; R4, R5 = H, lower alkyl, substituted alkyl; or R4R5 = (CH2)n; wherein n = 2,3; Z = (CH2)m, CH2OCH2CH2; wherein m = 1,2,3] are prepared These compds. inhibit Na+-Ca2+ exchange mechanism and inhibit reflux arrhythmia and shrinks a nest of cardiac infarction and are useful for the treatment of disorders caused by excess Ca2+ ions in myocardial ischemia, e.g. heart function disorders, myocardial infarction, and arrhythmia. Thus, a mixture of 1.67 g 2-[4-(3,4-dichlorobenzyloxy)phenyl]ethyl methanesulfonate (preparation given), 0.34 g thiourea, and 4.4 mL ethanol was refluxed overnight to give 1.10 g S-[2-[4-(3,4-dichlorobenzyloxy)phenyl]ethyl]isothiourea methanesulfonate. The latter compound showed IC50 of 4.9 μM for inhibiting Na+-Ca2+ exchange mechanism in cardiac sarcolemma vesicles (Reeves' assay described in J. Biol. Chemical, 1983).